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AFRICAN ORCHIDS. XIV

BY

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ANCISTORRHYNCHUS *Finet*

IN 1837 Lindley described *Angraecum clandestinum* from a plant cultivated in Messrs. Loddiges' nursery at Hackney, while in 1862 in his classical paper on West African orchids, he described *A. capitatum*, which was collected by Barter near the Brass River in Southern Nigeria. Ten years later the younger Reichenbach published a description of a species from the famous living collection of W. W. Saunders under the name of *Listrostachys cephalotes*. He pointed out its affinity with *Angraecum capitatum* Lindl. and for the first time clearly described the remarkable folded rostellum, which is actually common to all three species mentioned. Rolfe seems to have missed the significance of this feature, for in the Flora of Tropical Africa, although he places the above species, and also two additional ones of the same affinity, in the genus *Listrostachys*, he separates *L. clandestina* from the others and only refers vaguely to the rostellum in the specific descriptions. Instead he places greater emphasis on the occurrence of the flowers in short dense heads.

It was not until 1908 that Finet created the genus *Ancistrorhynchus*, containing two properly described and one imperfect species, the genus being especially charac-

terised by the striking rostellum structure. This organ projects downwards almost parallel with, or slightly diverging from, the front of the column and is then folded on itself to form an upwardly directed portion of sometimes equal length ending in an acute apex. On removal of the long and narrow viscidium, which is also folded in a similar manner, the two lateral lobes may be easily separated and then appear as shown in Finet's illustrations. Owing to the incomplete description of *Angraecum clandestinum* by both Lindley and Rolfe, Finet failed to realise that it also fell into his new genus, nor does he refer to any of the other species with similar rostellum included in the Flora of Tropical Africa.

It was Schlechter, in his account of the Angraecoid orchids in 1918, who first brought together all the species with the above rostellum. He divided them into two genera, *Ancistrorhynchus* Finet with a distinctly trilobed lip and a single pollinarium stipes entire or divided only at the apex, and secondly a new genus *Cephalangraecum*, characterised by an entire lip and the presence of two separate stipites to the pollinia. Incidentally in his comments on the latter genus he states that the stipe may sometimes be common (*gemeinsam*) but I cannot find on what authority this statement rests. It is certainly not true of any of the species included by him.

When I dealt with the two genera in the Flora of West Tropical Africa I separated them on account of the difference in the stipes and also the very different appearance of the leaves. In *Cephalangraecum* the leaves are only slightly unequally bilobed at the apex with more or less rounded lobes whereas in the species of *Ancistrorhynchus* which I had seen the leaves are much more unequally bilobed with acute lobes. The inflorescences also are distinctly less dense in *Ancistrorhynchus* than in the other genus.

Recently, however, my attention has been drawn to two East African species, namely *Ancistrorhynchus laxiflorus* Mansf., from the Uluguru Mountains in Central Tanganyika and *Listrostachys refracta* Kraenzl., from Usambara in the north of the same territory. This latter species was erroneously referred to *Cyrtorchis* by Schlechter although Kraenzlin's description clearly portrays the characteristic rostellum of the two genera referred to above. The interesting feature of these two species, which are evidently very closely allied, if not conspecific, is that they combine the supposed distinguishing features of *Ancistrorhynchus* and *Cephalangraecum*. The inflorescences are relatively lax and elongated as in the former genus, whereas the leaves are similar to those in many species of the latter. The pollinarium is intermediate, the stipes being divided to the middle in *L. refracta* and nearly as far in *A. laxiflorus*.

It is evident, therefore, that the two genera cannot be maintained as distinct since all the supposed differential characters break down, while at the same time the extremely striking rostellum remains almost constant throughout. It should be noted that in many of the species the lip is widened at the base forming large rounded but rather indistinct lobes, and indeed in few of the species is the lip clearly quite entire. An emended description is provided herewith.

***Ancistrorhynchus* Finet** in Mém. Soc. Bot. France 9 (1907) 44-47—Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 137-139—Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 462.

Cephalangraecum Schlechter l.c. 135-137—Summerhayes l.c. 461-462.

Epiphytic herbs; stems short and thick; leaves imbricate, suberect, spreading or recurved, parallel-sided

or tapering upwards, more or less unequally bilobed at the apex, lobes sometimes toothed or slightly lobulate, often fleshy and sometimes V-shaped with a keel; inflorescences arising from the axils of the lower leaves, almost sessile, usually forming globular or ellipsoid densely-flowered heads but sometimes laxer and few-flowered; rhachis short, usually thick; bracts small or more frequently large, membranous or chartaceous and equalling the flowers; flowers mostly white, sometimes with green markings; sepals oblong, elliptical or lanceolate, obtuse, laterals oblique; petals similar but usually narrowed in the lower part; lip oblong, ovate or almost orbicular in general outline with rounded apex and often widened at the base to form rounded rather indistinct lateral lobes, sometimes distinctly 3-lobed, front lobe usually undulate; spur straight or somewhat S-shaped, wide at the base, constricted in the middle and dilated at the apex, shorter than the ovary; column short or of medium length, semiterete; anther hemispherical, produced in front into a short truncate appendage only partially covering the rostellum; pollinia 2, globose or pyriform, stipes either 2 distinct to the base or a single one more or less bilobed in the upper half, apex in either case broad and flattened, viscidium long and narrow, attached to almost the entire length of the rostellum; rostellum projecting downwards in the basal half and parallel with or slightly divergent from the column, then sharply curved upwards terminating in an acute apex, on removal of the pollinia cleft to the base into two sickle-shaped lobes; stigmatic cavity below the rostellum and almost covered by it.

Type Species:—*A. recurvus* Finet.

The following is an enumeration of the species of *Anistrorhynchus* accepted here, with such synonymy as can

be ascertained with reasonable certainty. I have not seen a few of the species and for the moment the position of these must remain doubtful. Some name changes may be necessary when they have been investigated properly. The type specimens of the two new species are in the Kew Herbarium.

1. **Ancistrorhynchus brevifolius** *Finet* in Mém. Soc. Bot. France 9 (1907) 45, t. IX, figs. 1-14—Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 138.

From the description and illustration this species possesses the pollinarium of *A. recurvus* and leaves similar to those of many *Cephalangraecums*, that is, V-shaped in section with rounded apical lobes. The very broad trilobed lip and divergent spur are also characteristic.

FRENCH CONGO: Bangui, *Dybowski* 567 (not seen).

2. **Ancistrorhynchus capitatus** (*Lindley*) *Summerhayes* comb. nov.

Angraecum capitatum Lindley in Journ. Linn. Soc. Lond. Bot. 6 (1862) 137.

Listrostachys capitata Reichenbach filius in Flora 48 (1865) 190—Durand & Schinz Conspect. Fl. Afr. 5 (1895) 48—Rolfe in Dyer Fl. Trop. Afr. 7 (1897) 166.

Angorchis capitata O. Kuntze Rev. Gen. Pl. (1891) 651.

Listrostachys Gentilii De Wildeman Not. Pl. Utiles Congo (1903) 147; in Ann. Mus. Congo, Bot. sér. V. 1 (1904) 117, 2 (1907) 28; Mission É. Laurent (1906) 227, figs. 29, 30—Th. & H. Durand Syll. Fl. Congol. (1909) 530.

Cephalangraecum capitatum Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 136—Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 461.

Cephalangraecum Gentilii Schlechter l.c.

The denticulate apical lobes of the leaves distinguish this species from all the other described ones. These teeth vary considerably in size and number even on the same plant. The spur is also exceptionally long while the lip is more or less ovate and the basal lateral lobes very poorly developed.

SIERRA LEONE: Koyeima, *Deighton* 3360.

LIBERIA: Firestone Plantation No. 3, *Linder* 64.

NIGERIA: Brass River, *Barter* 1857 (TYPE).

BELGIAN CONGO: Bombe, Momboyo River, *Gentil* (not seen); Stanleyville, *Pynaert* 115; Eala, *Laurent* 752 (not seen).

Many more gatherings have been recorded from the Belgian Congo under the name of *Listrostachys capitata* but I have not seen any of them.

3. *Ancistrorhynchus cephalotes* (*Reichenbach filius*) *Summerhayes* comb. nov.

Listrostachys cephalotes Reichenbach filius in Gard. Chron. (1872) 1687—Durand & Schinz Consp. Fl. Afr. 5 (1895) 48—Rolfe in Dyer Fl. Trop. Afr. 7 (1897) 166.

Cephalangraecum cephalotes Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 136.

From the rather incomplete description of this species I suspect it to be the same as *A. glomeratus* (Ridley) Summerhayes but as I have not seen the type specimen of *A. cephalotes* I hesitate to put the two together.

WEST AFRICA: No exact locality; cult. *W. W. Saunders*, Reigate, Surrey, in 1872 (not seen).

4. *Ancistrorhynchus clandestinus* (*Lindley*) *Schlechter* in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 138 —Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 462, *pro maxima parte*.

Angraecum clandestinum Lindley in Hooker Comp. Bot. Mag. 2 (1837) 206—Reichenbach filius in Walp. Ann. 6 (1864) 906—Durand & Schinz Consp. Fl. Afr. 5 (1895) 41.

Angorchis clandestina O. Kuntze Rev. Gen. Pl. (1891) 651.

Listrostachys clandestina Rolfe in Dyer Fl. Trop. Afr. 7 (1897) 161.

Angraecum clandestinum var. *stenophyllum* Schlechter Westafr. Kautsch. Exped. (1900) 283.

Listrostachys Durandiana Kraenzlin apud Durand & De Wildeman in Compt. Rend. Soc. Bot. Belg. 38 (1899) 65 (Mater. Fl. Congo 3 (1889) 57)—De Wildeman in Ann. Mus. Congo, Bot. sér. V., 1 (1903) 25.

Angraecum brunneo-maculatum Rendle Cat. Talb. Nig. Pl. (1913) 105, 146, t. 14, figs. 6–9.

Ancistrorhynchus brunneo-maculatus Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 138.

Ancistrorhynchus Durandianus Schlechter l.c.

Ancistrorhynchus stenophyllus Schlechter l.c. 139.

A. clandestinus may be distinguished by the long narrow leaves which taper in the upper portion, terminating in a relatively sharp point formed by the longer apical lobe; the shorter lobe may be present as a small tooth as much as 5 cm. below the extreme apex or may be entirely absent, both types of leaf sometimes occurring on the same plant. In the type plant, a cultivated one, the leaves are only about 15 cm. long, but in other specimens, for example from the Belgian Congo and the Gabon, they may exceed a meter in length, and all intermediates have been noted. There may also be great variation in the fleshiness of the leaves but I have not been able to correlate this with other characters.

The inflorescences in *A. clandestinus* are longer and looser than in the species formerly included in *Cephalan-*

graecum while the bracts are triangular-ovate and comparatively short. The lip is distinctly trilobed, the middle lobe being more or less concave with an undulate somewhat infolded margin. The S-shaped spur separates the species from the *Cephalangraecum* species, but is also found in *A. recurvus* Finet and two Tanganyika species.

SIERRA LEONE: cult. *Loddiges* 1834 (TYPE); Kuntaia, *Thomas* 430; Kamalu, *Thomas* 491.

NIGERIA: Onitsha, *Barter* 444; Eket, *Talbot* 3744; Degema, *Talbot*; Oban, Ekong-Ndingane road, *Talbot* 943; Cameroons Mt., Buea, *Schlechter* 12843.

GABON: Upper Ngounyé River, Lake Bandoungou, *Le Testu* 5159.

BELGIAN CONGO: Pioka, *Laurent* (not seen).

5. *Ancistrorhynchus glomeratus* (Ridley) Summerhayes comb. nov.

Angraecum glomeratum Ridley in Gard. Chron. new ser. 24 (1885) 678—Durand & Schinz Consp. Fl. Afr. 5 (1895) 43.

Listrostachys glomerata Rolfe in Dyer Fl. Trop. Afr. 7 (1897) 166.

Cephalangraecum glomeratum Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 136—Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 461.

Distinguished by the slightly unequal apical lobes of the leaves which are rounded or slightly retuse or bilobulate but not denticulate, the very broad lip with the rounded almost hastate base enveloping the column and the relatively long spur. It may be necessary to reduce this species to *A. cephalotes* (Rchb.f.) Summerh. when the type specimen of the latter has been examined.

FRENCH GUINEA: Faranah, near R. Niger, *Chevalier* 20469.

SIERRA LEONE: no locality, cult. *Lendy* (TYPE); cult. Hort. Kew.

LIBERIA: M. Barclay, *Bunting* 7; no locality, cult. Hort. Kew, 1865.

NIGERIA: Nun River, *Barter* 20106.

6. **Ancistrorhynchus laxiflorus** *Mansfeld* in Notizbl. Bot. Gart. Berl. 12 (1935) 705.

This species may be recognised from all other species except *A. refractus* (Kraenzl.) Summerh. by the lax few-flowered but short inflorescences, the entire ovate lip and long slender column. The leaves are similar to those in *A. glomeratus* (Ridl.) Summerh. or *A. ovatus* Summerh. The pollinarium stipes is divided in the upper part while the viscidium is lanceolate and exceptionally large (over 8 mm. long altogether).

TANGANYIKA TERRITORY: Uluguru Mts., Mt. Mindu, *Schlieben* 3731.

7. **Ancistrorhynchus Metteniae** (*Kraenzlin*) *Summerhayes* comb. nov.

Angraecum cephalotes Kraenzlin in Mitteil. Deutsch. Schutzgeb. 2 (1889) 156, non *Listrostachys cephalotes* Reichenbach filius.

Listrostachys Metteniae Kraenzlin Xen. Orch. 3 (1893) 122, t. 270.

Listrostachys Braunii Durand & Schinz Consp. Fl. Afr. 5 (1895) 48—Rolfe in Dyer Fl. Trop. Afr. 7 (1897) 166.

Cephalangraecum Metteniae Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 137.

Cephalangraecum Braunii Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 462.

Easily recognised by the very short spur (2–3 mm. long) and broad almost orbicular lip with indistinct side lobes more or less enclosing the column. The leaves vary considerably in width and in the inequality of the apical lobing, but are usually rather narrow. A specimen from Mt. Mlinga, East Usambaras, Tanganyika Territory, collected by W. M. Moreau (No. 371) seems to be nearest this species but is more robust with broad leaves, slightly larger flowers and a spur nearly 4.5 mm. long.

It may eventually prove to be a distinct but closely allied species.

In the Flora of West Tropical Africa I used the epithet *Braunii* for this species under the mistaken impression that the portion of Volume 5 of Durand and Schinz's Conspectus in which it was first published appeared in 1892, a year before Kraenzlin's publication of the epithet *Metteniae*, both being based on the same type. On further examination of the evidence I am led to the view that the whole of the volume in question was not published until 1895 thus giving Kraenzlin's epithet two year's priority.

NIGERIA: Lagos, *Moloney*.

CAMEROONS: no locality, *Braun 19* (TYPE).

ST. THOMAS: Angolares, Lagoa Angra de S. Joao, *Quintas 12* (fruit only).

UGANDA: Entebbe, *Fyffe 70*; near Bajo, *Dümmer 2825*.

8. **Ancistrorhynchus ovatus** *Summerhayes sp. nov.*
affinis *A. glomerato* (Ridl.) Summerh. et *A. Metteniae* (Kraenzl.) Summerh., ab hoc calcari quam labello fere duplo longiore, ab utroque labello ovato integro basi columnam haud involvente distinguitur.

Herba epiphytica; caulis usque ad 20 cm. longus, fere 5 mm. diametro, superne foliatus, inferne vaginis foliorum delapsorum \pm obtectus, radices ramosas flexuosas squamuloso-rugulosas 1–2 mm. diametro emittens. *Folia* basi imbricata, suberecta, patentia vel rarius recurvata, lineari-ligulata, supra articulum 7–19 cm. longa, 5–14 mm. lata, basi vix angustata, apice inaequaliter bilobata, lobis rotundatis vel rotundato-acutis interdum brevissime bilobulatis vel retusis lobo longiore usque ad 1 cm. longo, superne plana, basi \pm conduplicata, costa supra impressa subtus leviter carinata. *Inflorescentiae* ex axillis foliorum inferiorum exortae, sessiles, globoso-vel ovoideo-capita-

tae, 1–2 cm. longae et diametro, multiflorae; bracteae flores aequantes, ligulatae, oblanceolatae vel ovato-lanceolatae, acutae, 6–12 mm. longae, usque ad 5 mm. latae, scariosae. *Flores* albi; pedicellus cum ovario 6–8 mm. longus. *Sepalum* intermedium oblongo-ellipticum, apice rotundatum, 3.3–4.4 mm. longum, 1.3–2 mm. latum; sepala lateralialia elliptico-oblonga, leviter obliqua, apice rotundata, 3.5–4.6 mm. longa, 1.3–2 mm. lata; omnia sepala trinervia. *Petala* late elliptico-oblanceolata, apice rotundata, 3.25–4.5 mm. longa, 1.3–2.1 mm. lata, trinervia, nervis lateralibus breviter ramosis. *Labellum* ± concavum, late ovatum, apice rotundatum, 3–4.25 mm. longum, 2.4–3.5 mm. latum, marginibus leviter flexuosis et undulatis; calcar ex ore lato sensim angustatum, triente apicali inflatum, apice ipso rotundatum, totum 4.6–5.8 mm. longum. *Columna* crassa, semiteres, 0.8–1.4 mm. alta, truncata, androclinio leviter excavato; anthera subhemisphaerica, antice breviter producta, truncata; pollinia fere globosa, stipitibus 2 apice recurvatis spathulato-dilatatis, 0.5–0.7 mm. longis, viscidio medio implicato elliptico-ligulato, 0.8–1.2 mm. longo; rostellum inferne descendens, deinde hamato-implicatum, apice acutum, in toto circiter 1 mm. longum, viscidio amoto fere ad basin bipartitum; fovea stigmatica quadrato-elliptica.

Evidently closely allied to *A. glomeratus* (Ridl.) Summerh. and *A. Metteniae* (Kraenzl.) Summerh. with which it agrees closely in habit and leaf characters. The combination of ovate lip without the least sign of the rounded side lobes so characteristic of the other two species and moderately long slender spur distinguishes it from both of them.

BELGIAN CONGO: Prov. of Uele, R. Wamba, 1911, *Claessens* 1047.

UGANDA: Budongo Forest, *Eggeling* 3053; Budongo, June 1937, *Eggeling* 3360; Budongo, Bunyoro, June 1935, *Eggeling* 2048 (TYPE).

9. **Ancistrorhynchus parviflorus** *Summerhayes sp. nov.* ab *A. Straussii* (Schltr.) Schltr. foliis brevioribus minus bilobatis, labello latiore quam longo, calcari fere globoso quam labello brevior, columna crassiore et brevior, polliniis pro rata majoribus distinguendus.

Herba epiphytica; caulis circiter 5 cm. longus et 3 mm. diametro, superne dense foliatus, inferne radices flexuosas 1–1.5 mm. diametro emittens. *Folia* basi imbricata, patentia, rigida, lineari-oblonga vel ligulata, supra articulum 3–4 cm. longa, 6–8 mm. lata, basi leviter angustata, apice leviter inaequaliter bilobata, lobis obtusis vel rotundatis leviter incurvatis, costa subtus prominente, nitida, viridissima. *Inflorescentiae* ex axillis foliorum inferiorum exortae, sessiles, globoso-capitatae, circiter 5 mm. diametro, dense pluriflorae; bracteae floribus breviores, fere orbiculares, circiter 3 mm. longae et latae, scariosae. *Flores* albi, nitentes; pedicellus cum ovario 2–2.5 mm. longus. *Sepala* oblongo-elliptica, lateralia leviter obliqua, 2.5 mm. longa, 1.5 mm. lata, apice rotundata. *Petala* elliptico-obovata, apice rotundata vel obtusissima, fere 2.5 mm. longa, 1.5 mm. lata. *Labellum* obscure trilobatum, late reniformi-ovatum, apice rotundatum, 1.75 mm. longum, 2.25 mm. latum, lobis lateralibus rotundatis columnam basi amplectentibus; calcar fere globosum, 1.25 mm. longum et diametro, fere pellucidum. *Columna* brevis, crassa, vix 1 mm. alta, truncata, androclinio leviter excavato; anthera \pm hemisphaerica, antice brevissime producta et truncata; pollinia pyriformi-globosa, stipitibus 2, apice subspathulato-dilatatis 0.25 mm. longis, viscidio ligulato antice implicato 0.5 mm. longo; rostellum descendens, quarta parte apicali hamato-implicatum, apice obtusum, in toto circiter 0.5 mm. longum, viscidio amoto fere ad basin tripartitum, partitio intermedia dentiformis quam laterales multo brevior; fovea stigmatica quadrato-orbicularis.

Characterised by the short leaves and small flowers which are about the same size as those of *A. Straussii* (Schltr.) Schltr. The lip, however, is much broader than in that species, while the spur is almost globular and shorter than the lip. In *A. parviflorus* the rostellum, although agreeing in general features with that of the other species of the genus, is turned up for only a short distance at the apex.

TANGANYIKA TERRITORY: Amani, 3000 ft. alt., on mossy bole of rain forest tree, July 1941, *Moreau* 70.

10. *Ancistrorhynchus recurvus* Finet in Mém. Soc. Bot. France 9 (1907) 46, t. IX, fig. 15–27—Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 138.

Ancistrorhynchus clandestinus Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 462, *pro minima parte*.

This species, which I consider to be the type of the genus, resembles *A. clandestinus* (Lindl.) Schltr., but the leaves are consistently shorter and relatively broader while the lobes are less unequal and subacute or almost rounded and very shortly lobulate. Florally the species has the trilobed lip, somewhat S-shaped spur and only slightly bilobed pollinarium stipes of *A. clandestinus*.

FRENCH GUINEA: Between Timbo and Conakry, *Pobéguin* 788 (not seen).

GOLD COAST: Between Assin and Yan Kumassi, *Cummino* 87.

GABON: Fernand Vaz, *Lecomte* (TYPE); Lambaréné, *Thollon* (not seen); Koulamotou, Upper Ogoué River, *Le Testu* 7997.

11. *Ancistrorhynchus refractus* (Kraenzlin) Summerhayes comb. nov.

Listrostachys refracta Kraenzlin in Engler Bot. Jahrb. 33 (1902) 74.

Cyrtorchis refracta Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 132.

It is difficult to see why Schlechter referred this species to *Cyrtorchis* since Kraenzlin described clearly the

characteristic *Ancistrorhynchus* rostellum and the general structure of the flower is quite unlike that of *Cyrtorchis*. *A. refractus* is very close to, if not identical with, *A. laxiflorus* Mansf., from which it differs in the longer and narrower lip with the base widened to form rather obscure side-lobes, and in the shape of the spur. This tapers gradually from the mouth to the narrowest part whereas in *A. laxiflorus* it tapers very little until it is suddenly contracted to a narrow neck just below the apical swelling. It still remains doubtful if these differences are really specific.

TANGANYIKA TERRITORY: Usambara, Derema, *Scheffler 123* (TYPE, not seen): Amani, *Zimmermann*.

12. *Ancistrorhynchus Straussii* Schlechter in Beih. Bot. Centralbl. 36, Abt. 2 (1918) 139.

Angraecum Straussii Schlechter in Engler Bot. Jahrb. 38 (1906) 164—Rendle Cat. Talb. Nig. Pl. (1913) 106, 146.

Cephalangraecum Straussii Summerhayes in Hutchinson & Dalziel Fl. West Trop. Afr. 2 (1936) 462.

Easily recognisable by the narrow and relatively short leaves and the small flowers, the perianth members being less than 2.5 mm. long. In column structure the species agrees with the other members of the genus.

NIGERIA: Oban, *Talbot 940*; Moliwe, *Schlechter 15771* (TYPE); Eket, *Talbot*.

BELGIAN CONGO: Ituri Forest, *Chandler 2448*.

In addition to and evidently quite distinct from the above twelve species is a fruiting gathering (*Mann 2123*) from 5000 ft. altitude on the Cameroons Mountain doubtfully referred to *A. Metteniae* (Kraenzl.) Summerh. (sub *Listrostachys Braunii* Dur. & Schinz) by Rolfe in the Flora of Tropical Africa (vol. 7, p. 167). This has short strap-shaped leaves with slightly unequal rounded apices which are very finely denticulate-serrate.

NOTES ON PERUVIAN ORCHIDS

BY

CHARLES SCHWEINFURTH

In the course of my study of the orchid flora of Peru, the following amplifications and alterations appeared to be advisable.

Koelensteinia peruviana *Schlechter* in *Orchis* 12 (1918) 28.

In consideration of a collection, *McCarroll* 84, which is surely referable to this species, as well as a minute examination of a photograph of the type collection, *Ule* 6691, it seems advisable to publish certain additional data and corrections to the published description.

The description of *K. peruviana* specifies an abbreviated rhizome and aggregated pseudobulbs, whereas *McCarroll* 84 has the pseudobulbs separated a distance of 4 cm. on a stout sheathed rhizome. Of greater importance, the pseudobulbs of this collection, as well as those of the type of *K. peruviana* and of *K. ionoptera* Linden & Reichb. f., are surmounted by a long slender caulescent neck which may reach a length of 13.5 cm. The petiole of the leaf appears to be elongate and up to 11.5 cm. long. The floral segments are smaller than specified, the sepals being about 11.2 mm. long (as in the type of *K. peruviana*) and not 14 to 15 mm. long as described. They are oblong-elliptic, elliptic or ovate as shown in the photograph of the type, scarcely oblong or ligulate-oblong as described. Finally, the lip is only about 6.2 mm. long and not 12 mm. long as described, and is not broadly clawed but sessile and articulated to the free portion of the column-foot.

PERU: Dept. Puno, Sandia, Sta. Domingo area, at 1550 meters altitude, December 22, 1940, *D. McCarroll* 84.

Chondrorhyncha lojæ (*Schlechter*) *C. Schweinfurth*
comb. nov.

Kefersteinia lojæ Schlechter in Fedde Repert. Beih.
8 (1921) 93; ex Mansfeld in Fedde Repert. Beih. 57
(1929) t. 95, nr. 373.

Apparently the only discrepancy between the concept *Kefersteinia* and the earlier genus *Chondrorhyncha* rests in the presence in *Kefersteinia* of a longitudinal keel on the anterior face of the column which character is apparently lacking in *Chondrorhyncha*. I believe that this difference is not only inconsequential but often obscure and that *Kefersteinia* should become a synonym of *Chondrorhyncha*.